



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,249	03/07/2002	Gang Wu	4035-0147P	9274

2292 7590 09/07/2004

BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER
----------

HUANG, WEN WU

ART UNIT	PAPER NUMBER
----------	--------------

2682

DATE MAILED: 09/07/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.	Applicant(s)
10/092,249	WU ET AL.
Examiner	Art Unit
Wen Huang	2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on \_\_\_\_.  
2a) This action is FINAL.                    2b) This action is non-final.  
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1 and 2 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
5) Claim(s) \_\_\_\_ is/are allowed.  
6) Claim(s) 1 and 2 is/are rejected.  
7) Claim(s) \_\_\_\_ is/are objected to.  
8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
    1. Certified copies of the priority documents have been received.  
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
    Paper No(s)/Mail Date #4.

4) Interview Summary (PTO-413)  
    Paper No(s)/Mail Date. \_\_\_\_.  
5) Notice of Informal Patent Application (PTO-152)  
6) Other: \_\_\_\_.

**DETAILED ACTION*****Priority***

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 09/07/2001. It is noted, however, that applicant has not filed a certified copy of the JAPAN 2001-317471 application as required by 35 U.S.C. 119(b).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Walsh et al ("Hybrid Networks – A Step Beyond 3G").

Regarding claim 1, Walsh et al teach a network system that seamlessly integrates wireless communication systems, such network system being characterized in that (see Walsh et al, abstract):

an architecture of the network system includes at least four building blocks including a mobile host, a wireless access network, a common core network, and an external network (see Walsh et al, fig. 6);

the building block of the external network has a correspondent node (see Walsh et al, fig. 6, component "CN");

the external network and the common core network are connected together via at least one gateway router (see Walsh et al, fig. 6, component "BG");

the building block of the common core network has two functional modules including a resource manager and a mobility manager (see Walsh et al, fig. 6, components "TC" and "MM");

the building block of the wireless access network internally comprises at least one set of base stations or access point interfaces and base stations or access point interfaces and network interfaces (see Walsh et al, fig. 6, components "Access System");

the base stations or the access point interfaces realize an access mechanism that enable access between the common core network and the base stations or access points (see Walsh et al, fig. 6, component "IU"); and

the network interface realizes an access mechanism that enables access between the base stations or access points and the mobile host (see Walsh et al, fig. 7, component "SM").

Regarding claim 2, Walsh et al further teach a seamless integrated network system for wireless communication systems according to claim 1, characterized in that (see Walsh et al, abstract):

the building block of said common core network has a basic access network (see Walsh et al, III.2.1, tenth paragraph, "selected access system");

the basic access network is composed of a network interface of base stations or access points, base stations or access points, and basic access components (see Walsh et al, fig. 6, component "Access System");

said mobile host is composed of at least a network interface, a network selector, a basic access component, and a local resource manager (see Walsh et al, fig. 7, component "RS");

it is inherent that a mobile host is composed of a locator in order to signal with Home Agent (see Walsh et al, III.2, last paragraph); and

the basic access component of the basic access network and the basic access component of the mobile host communicate with each other (see Walsh et al, fig. 7, components "SM" and "RS").

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

<http://www.ist-drive.org/papers.html> shows a collection of papers that are closely related to the invention.

Dillinger ("Advanced Spectrum Sharing Techniques") teaches the use of SDR in transceiver.

Wu et al ("Wireless Internet over Heterogeneous Wireless Networks") clearly teach the technology of the invention.

Xu et al, ("DRiVE-ing to the Internet: Dynamic Radio for IP Services in Vehicular Environments", IEEE , 2000) teach the basic of DriVE architecture.

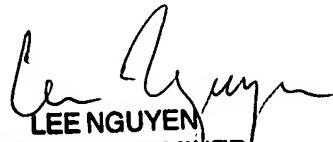
Keller et al , ("Convergence of Cellular and Broadcast Networks from a Multi-Radio Perspective", IEEE, 2001) teach integrated mobile terminals with different radio technology.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wen Huang whose telephone number is (703) 305-6285. The examiner can normally be reached on 10am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (703) 308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

wwh 9/11/04

  
LEE NGUYEN  
PRIMARY EXAMINER